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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,671	07/09/2003	John Frederick Porter	D1815-00068	9831
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DUANE MORRIS, LLP IP DEPARTMENT ONE LIBERTY PLACE PHILADELPHIA, PA 19103-7396			EXAMINER PIERCE, JEREMY R	
			ART UNIT 1771	PAPER NUMBER

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/615,671

Applicant(s)

PORTER ET AL.

Examiner

Jeremy R. Pierce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 10-21 and 30-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 22-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/9/03.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9 and 22-29, drawn to a fabric reinforcement, classified in class 442, subclass 129.
  - II. Claims 10-21, drawn to a cementitious board, classified in class 52, subclass 309.17.
  - III. Claims 30-33, drawn to a method for making a coated fabric, classified in class 427, subclass various.
  - IV. Claims 34 and 35, drawn to a method of making a cementitious board, classified in class 264, subclass various.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a conveyor belt fabric and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on

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the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Invention I is related to Inventions III and IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the claimed product may be produced by coating the fibers before assembling them into a fabric.
4. Invention II is related to Inventions III and IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the board may be made by bonding fabrics to an already formed cementitious core.
5. Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation because Invention III is directed to coating a fabric, whereas Invention IV is directed to molding a cementitious product.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Peter Cronk on November 10, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-9 and 22-29. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-21 and 30-35 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 8 recites a "hydrophilic agent" and an "oleophilic agent." However, the specification does not teach what these materials might be. Claim 9 recites a "hydrophobic agent" and an "oleophobic agent." Likewise, there is no teaching in the specification as to what might be suitable agents.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 6, 8, and 9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 8, and 9 recite a "pvc-based plastisol." The abbreviation should not be used in the claims unless specifically defined. The Examiner will assume that "pvc" should mean polyvinyl chloride.

***Claim Rejections - 35 USC § 102/103***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-5, 7, 9, 22, and 25-29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kobayashi et al. (U.S. Patent No. 4,460,633).

Kobayashi et al. disclose a reinforcement fabric comprising warp and weft yarns that are soft twist multifilament yarns (column 2, lines 5-20). The weft yarns have a greater amount of twist than the warp yarns (Example 1). Although Kobayashi et al. do not teach the coating weight distribution ratio of less than 2.0:1, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. multifilament warp and weft threads) and in the similar production steps (i.e. weft threads twisted more than the warp threads) used to produce the reinforcement fabric. Further support for inherency is found in the fact that the warp yarns make up a lot more of the fabric than the weft yarns do (see Figure 2). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed ratio of coating weight would obviously have been provided by the process disclosed by Kobayashi et al. Kobayashi et al. teach impregnation of the matrix resin into the warp becomes easy (column 2, lines 39-43). Kobayashi et al. also teach that inhibiting impregnation of matrix resin to the warp is preferably avoided (column 1, line 67 –column 2, line 2). Finally, Kobayashi et al. teach that improved strength is obtained with matrix resin impregnated into the warp yarns (column 3, lines 32-36). Therefore, It would have been obvious to a person having ordinary skill in the art at the time of the invention to increase the amount of coating on the warp threads in order to increase the strength of the fabric, as taught by Kobayashi et al. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

With regard to claims 2 and 25, Kobayashi et al. teach providing a warp twist between 5 and 40 times/m (column 2, lines 57-58). With regard to claims 3 and 25, Kobayashi et al. disclose a weft twist of not more than 40 turns/m, but preferably not more than 20 turns/m (column 3, lines 2-4). With regard to claim 4, Kobayashi et al. teach glass fiber for both warp (column 2, line 53) and weft (column 2, line 66). With regard to claim 5, Kobayashi et al. teach a nonwoven scrim fabric (Figure 2). With regard to claims 7 and 26, drawing the warp yarns in tension is a method of manufacturing limitation, not a product limitation. With regard to claims 9 and 29, the adhesive added to the weft yarns prior to formation of the fabric (column 2, lines 10-11) would act as a hydrophobic or oleophobic agent.

### ***Claim Rejections - 35 USC § 103***

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Endo et al. (U.S. Patent No. 4,581,275).

Kobayashi et al. teach that the fabric is a reinforcement, but do not teach using it in a cementitious panel. Endo et al. teach that similar fabrics are used to reinforce cement (column 1, lines 5-18). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the fabric of Kobayashi et al. to reinforce cement in order to derive greater usage from the fabric, as taught by Endo et al.



16. Claims 6, 8, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view Endo et al. as applied above, and further in view of Wu et al. (U.S. Patent No. 5,038,555).

Neither Kobayashi et al. nor Endo et al. teach using a PVC coating. Wu et al. teach that fiberglass scrims used to reinforce concrete are coated with PVC plastisol (column 8, lines 2-4). It would have been obvious to a person having ordinary skill in the art at the time of the invention to coat the fiberglass scrim of Kobayashi et al. with PVC in order to make the fiberglass reinforcement suitable for reinforcing cement, as taught by Wu et al. With regard to claim 8, Wu et al. teach providing lubricity to the glass fibers before applying the PVC coating (column 10, lines 11-34).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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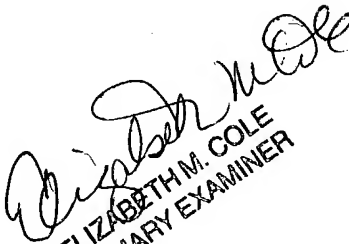
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JRP

JRP  
November 23, 2004

  
ELIZABETH M. COLE  
PRIMARY EXAMINER